sPHENIX Calorimeter Electronics Meeting
25-Aug-2016

Update on EMCal frontend electronics (See talk by S. Boose for full details):

- A number scheme for the EMCal prototype was presented. The approach simplifies various aspects for the hardware design.
- New SiPM daughter board design was presented. Single thermocouple/LED for 4 towers. Four daughter boards per preamp board. After the meeting there was an extended discussion on the pros and cons for connectors, pins or cables to connect the daughter boards to the preamp board. Concerns about reliability verses ease of maintenance. It was concluded that a mock up would help in understanding and evaluating all the issues. Plan is to do a first pass of the daughterboard assuming that pins/connectors will be used. A dummy preamp board (estimated dimensions with properly place holes) will be fabricated for evaluation.
- Discussion on SiPM placement as a function of eta. Question about how many variants of the SiPM boards will be required. Need to get feed back from the mechanical design group.

Update on HCal frontend electronics (verbal by S. Boose).

- Rev B of the interface board has been received and is being assembled in house
- Uses "coolrunner" logic like the EMCal interface board.
- Next big effort will be programming and testing it.
- Discussion about getting additional help, Abeshek and Eric were possible suggestions to help out.

Update on digitizers (S. Campbell, see talk for details)

- Have digitizer crate, controller and 1 digitizer board at BNL
- Currently setup in 1008
- Preliminary tests show that it is preforming as well or better then it had at Nevis.
- Next step is to complete the initial baseline tests, then move to internal pulsing, followed by external pulsing. Chi will provide a card that accepts HBD preamps that can be used as a test pulse input. BNL will provide HBD preamps boards, pulser and power supply.
- Data format for data from the digitizer crate controller was presented. It was noted that readout through the crate controller was a temporary measure until the XMIT board was fully tested (<2 8 weeks). Readout through the XMIT board will have PHENIX packet structure and PRDF format.
- For the next week or so, system will stay at 1008 until Martin is back and can help get it on the network in 510 HCal lab.

Next meeting in 2 weeks, 7-Sept, which conflicts with tracking review, so stay tuned for meeting updates